FIG. 1

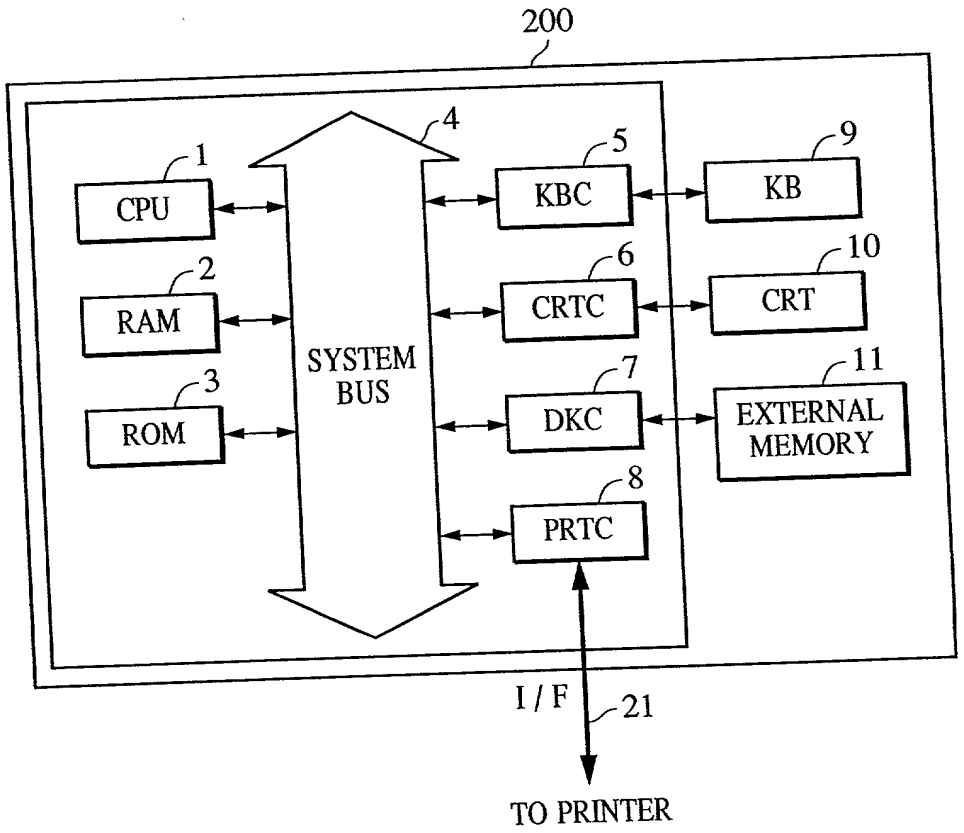

200
1
CPU
2
RAM
3
ROM
4
SYSTEM BUS
5
KBC
6
CRTC
7
DKC
8
PRTC
9
KB
10
CRT
11
EXTERNAL MEMORY
I / F
21
TO PRINTER

FIG. 2

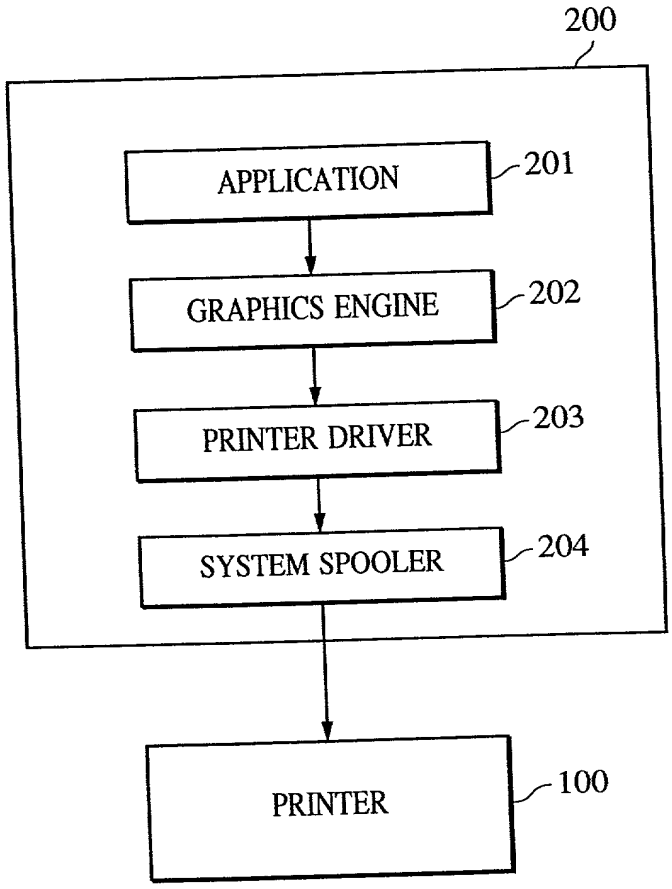

200
APPLICATION
201
GRAPHICS ENGINE
202
PRINTER DRIVER
203
SYSTEM SPOOLER
204
PRINTER
100

FIG. 3

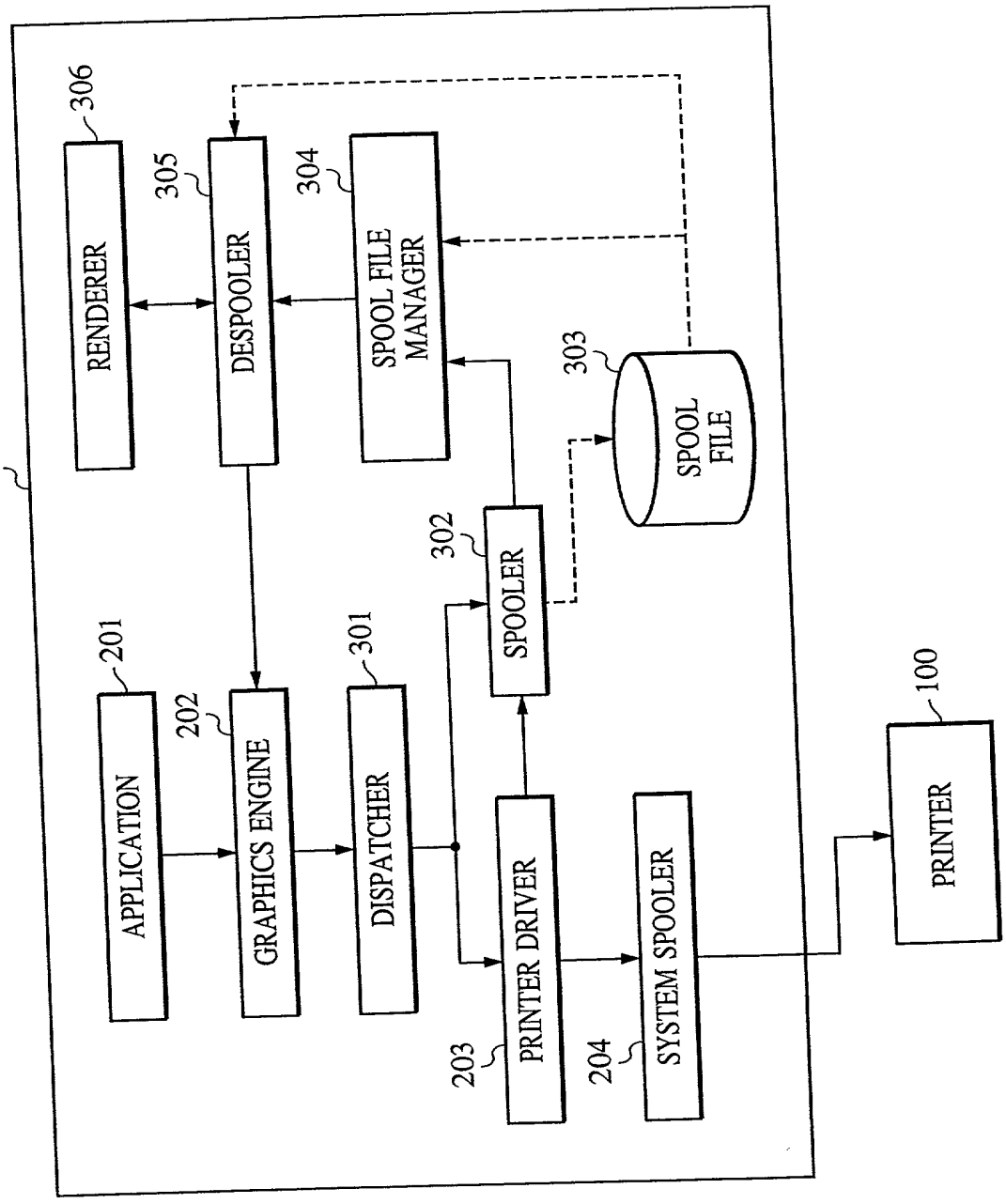

200
RENDERER
306
DESPOOLER
305
SPOOL FILE MANAGER
304
SPOOL FILE
303
SPOOLER
302
APPLICATION
201
GRAPHICS ENGINE
202
DISPATCHER
301
PRINTER DRIVER
203
SYSTEM SPOOLER
204
PRINTER
100

FIG. 4A

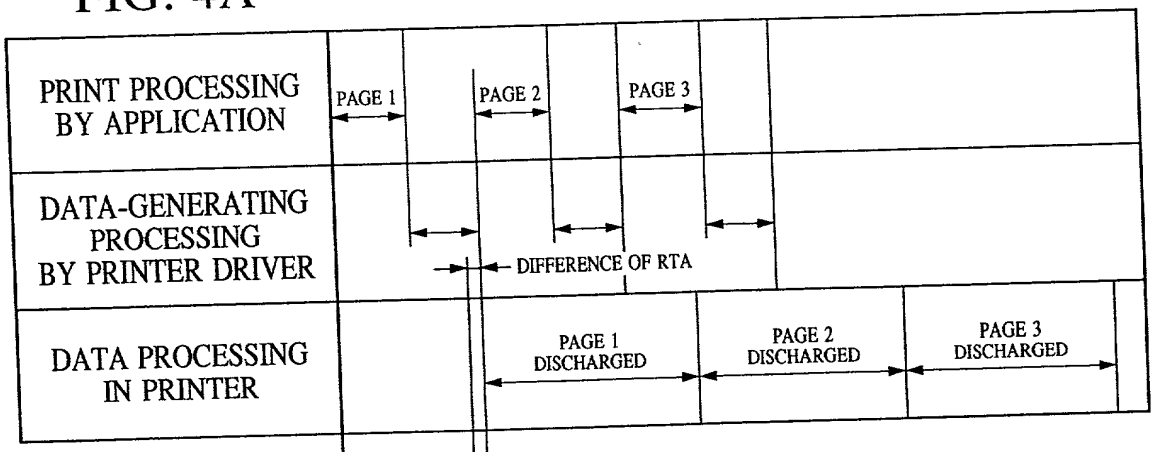
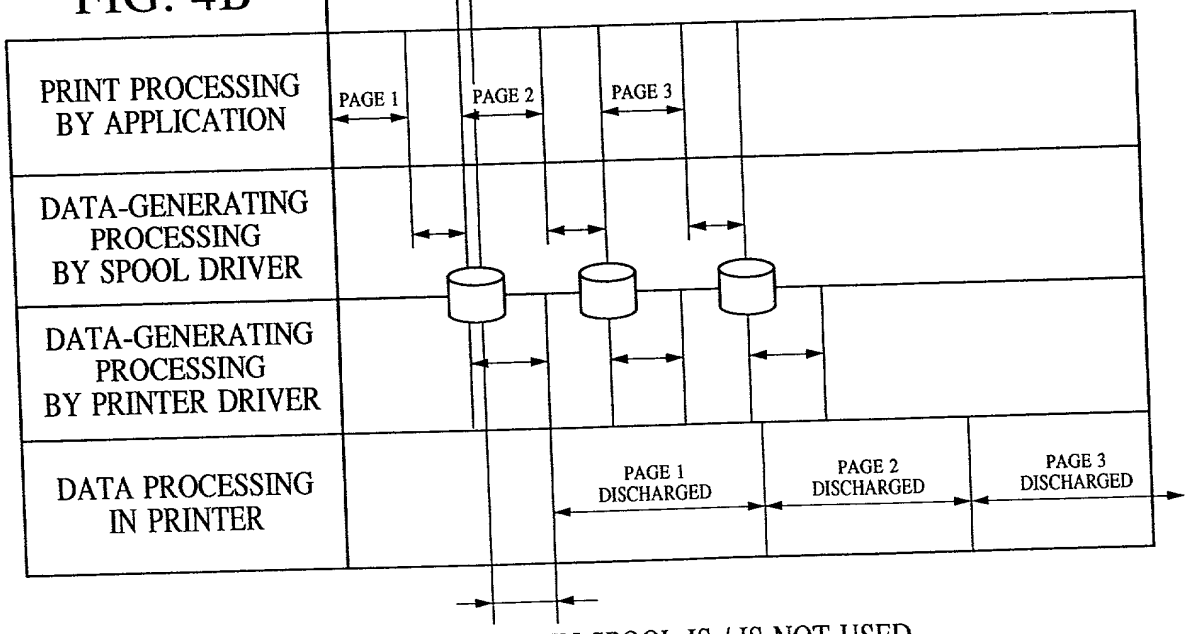


FIG. 4B



DIFFERENCE GENERATED WHEN SPOOL IS / IS NOT USED

FIG. 5

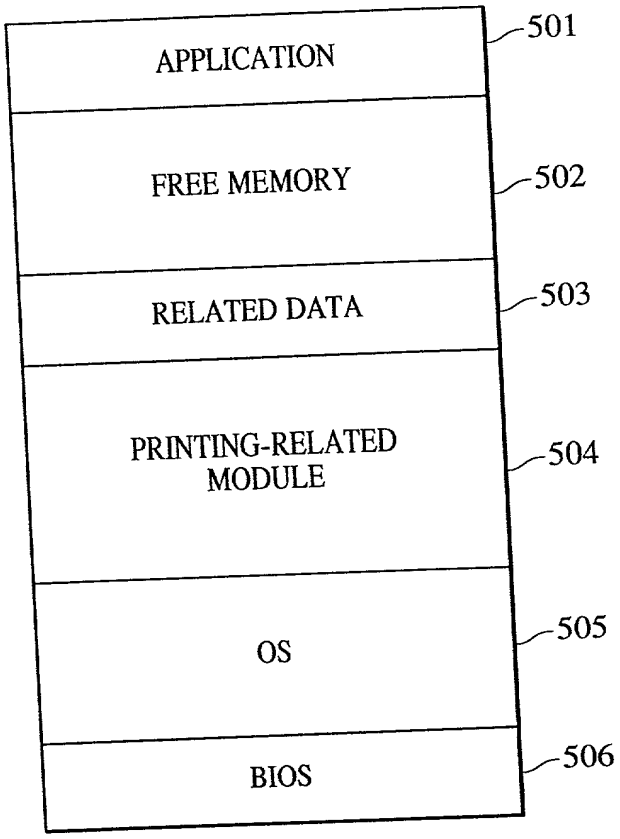

APPLICATION
501
FREE MEMORY
502
RELATED DATA
503
PRINTING-RELATED MODULE
504
OS
505
BIOS
506

FIG. 6

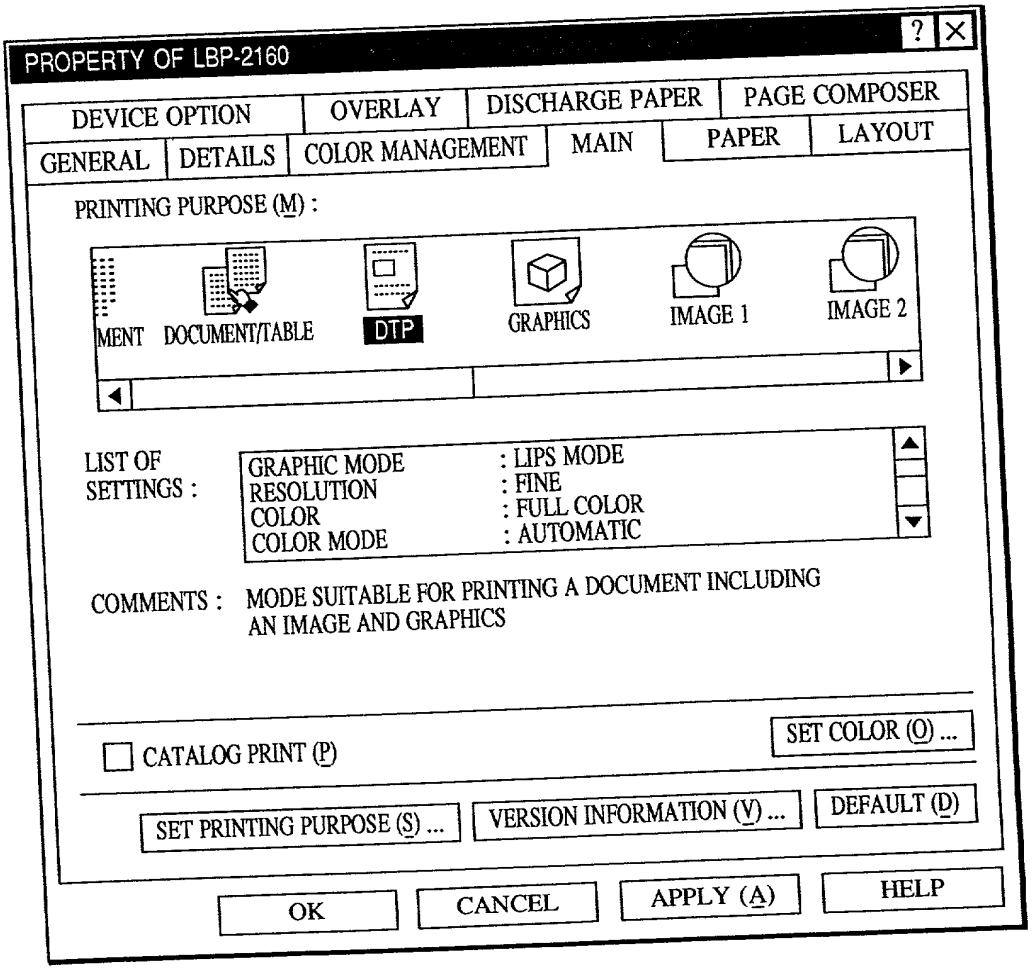

PROPERTY OF LBP-2160
DEVICE OPTION
OVERLAY
DISCHARGE PAPER
PAGE COMPOSER
GENERAL
DETAILS
COLOR MANAGEMENT
MAIN
PAPER
LAYOUT
PRINTING PURPOSE (M) :
MENT
DOCUMENT/TABLE
DTP
GRAPHICS
IMAGE 1
IMAGE 2
LIST OF SETTINGS :
GRAPHIC MODE : LIPS MODE
RESOLUTION : FINE
COLOR : FULL COLOR
COLOR MODE : AUTOMATIC
COMMENTS : MODE SUITABLE FOR PRINTING A DOCUMENT INCLUDING AN IMAGE AND GRAPHICS
CATALOG PRINT (P)
SET COLOR (O) ...
SET PRINTING PURPOSE (S) ...
VERSION INFORMATION (V) ...
DEFAULT (D)
OK
CANCEL
APPLY (A)
HELP

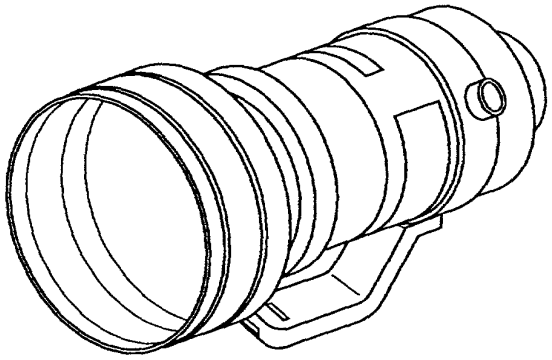
FIG. 7

○○○○○

NEW-GENERATION SUPER-TELEPHOTO LENS WITH A BUILT-IN CAMERA-SHAKE CORRECTION MECHANISM, ENABLING A MAXIMUM LEVEL IMAGE

"CANON LENS EF400mm"

1. SUPER HIGH IMAGE QUALITY BASED ON NEW OPTICAL DESIGN
By using UD glass for the second and third lenses, and fluoric material for the fifth lens, the second spectrum can be minimized which is likely to occur in a telephoto lens and which is a factor of deterioration in image quality. This realizes high resolution and high contrast image quality.



600-dpi
IMAGE DATA
WITH 8 BITS FOR
EACH OF RGB

2. BUILT-IN CAMERA-SHAKE CORRECTION MECHANISM
A camera-shake correction mechanism is an advanced technology of Canon in which, by moving part (correction optical system) of an optical system perpendicularly to an optical axis in accordance with a hand shake detected by an in-lens vibrating gyroscope, rays of light are refracted in a direction canceling an image blur. This provides approximately two-stage correction effects in shutter speed. For the lens on sale this time, a dedicated camera-shake correction unit in which a large output actuator is employed has been newly developed in order to drive the correction optical system for a large-aperture super telephoto lens.

The camera-shake correction mechanism has the following feature :
camera-shake correction mechanism 2

FIG. 8

DATE OF PRINTING	PRINTER	OPERATION STATUS P;01, P.02, P.03, P.04, P.05, · · ·
1999/05/25	mitsu	IMAGE, PDL, IMAGE, PDL, PDL,

FIG. 9

TIME AND DATE OF PRINTING		
PRINTER		
FILE NAME		
DATE OF FILE CREATION		
DATE OF FILE UPDATING		
APPLICATION NAME		
APPLICATION VERSION		
DRIVER OPERATION STATE		
TOTAL NUMBER OF PAGES		
1ST PAGE	TEXT	NUMBER OF OBJECTS
		MAXIMUM POINT SIZE
	GRAPHICS	NUMBER OF OBJECTS
		ROP
	IMAGE	RESOLUTION, GRADATION
		DATA SIZE
		ROP
2ND PAGE	TEXT	NUMBER OF OBJECTS
		MAXIMUM POINT SIZE
	GRAPHICS	NUMBER OF OBJECTS
		ROP
	IMAGE	RESOLUTION, GRADATION
		DATA SIZE
		ROP

FIG. 10

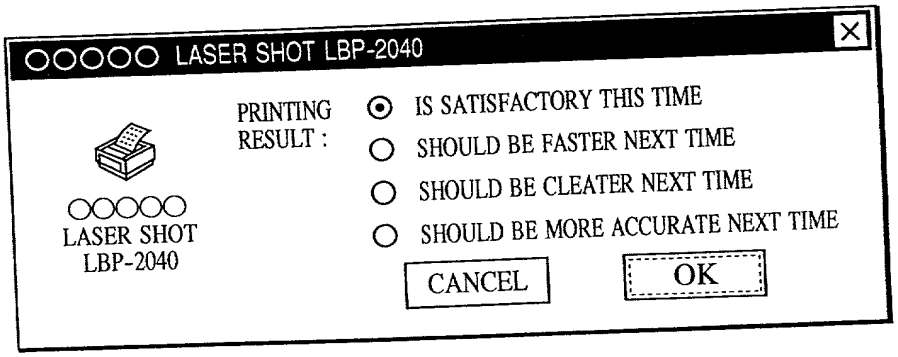


FIG. 11

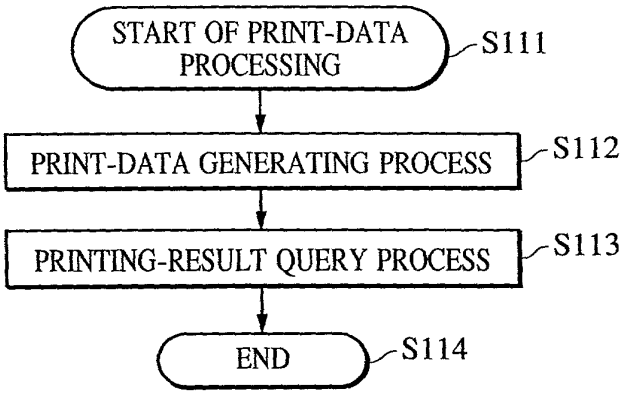

START OF PRINT-DATA PROCESSING
S111
PRINT-DATA GENERATING PROCESS
S112
PRINTING-RESULT QUERY PROCESS
S113
END
S114

FIG. 12

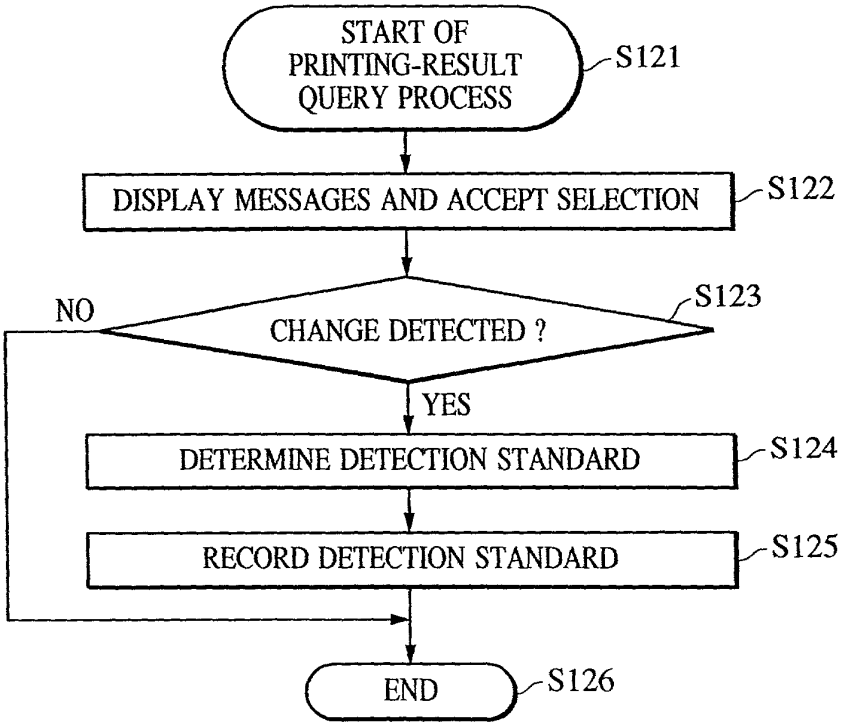

START OF PRINTING-RESULT QUERY PROCESS
S121
DISPLAY MESSAGES AND ACCEPT SELECTION
S122
CHANGE DETECTED ?
S123
NO
YES
DETERMINE DETECTION STANDARD
S124
RECORD DETECTION STANDARD
S125
END
S126

FIG. 13

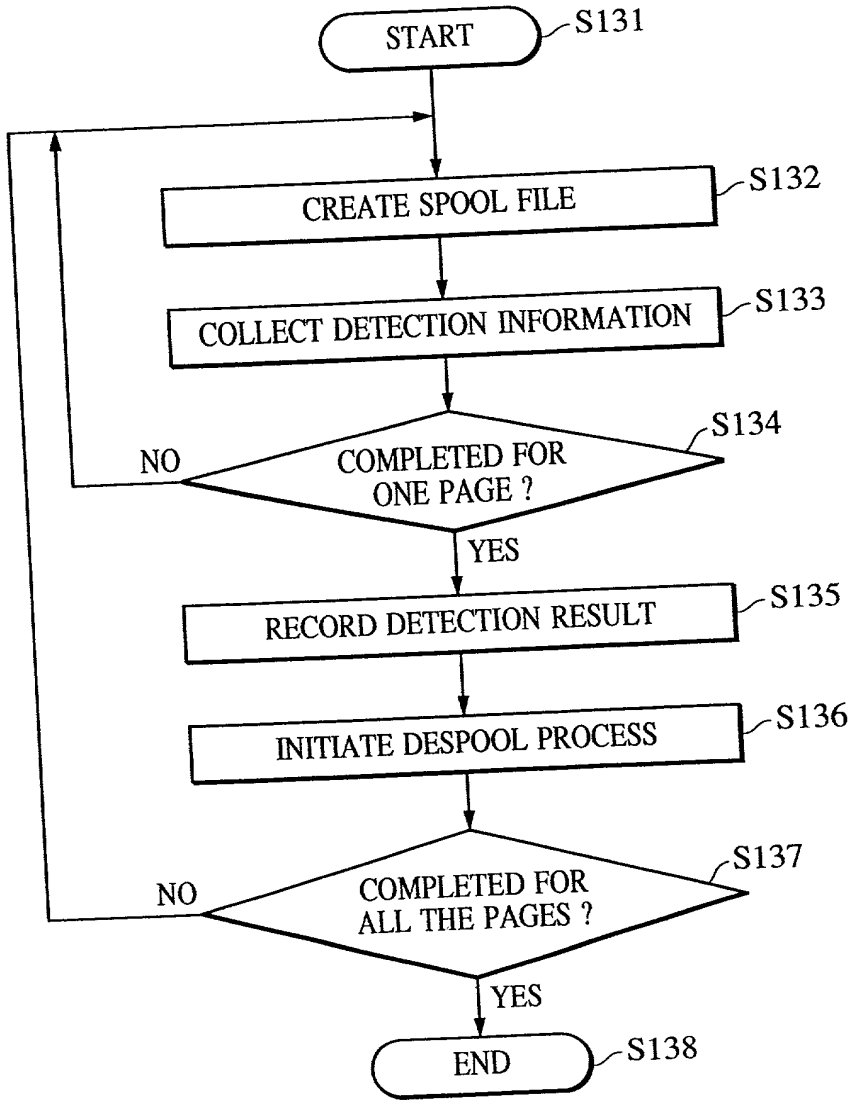

START
S131
CREATE SPOOL FILE
S132
COLLECT DETECTION INFORMATION
S133
COMPLETED FOR ONE PAGE ?
S134
NO
YES
RECORD DETECTION RESULT
S135
INITIATE DESPOOL PROCESS
S136
COMPLETED FOR ALL THE PAGES ?
S137
NO
YES
END
S138

FIG. 14

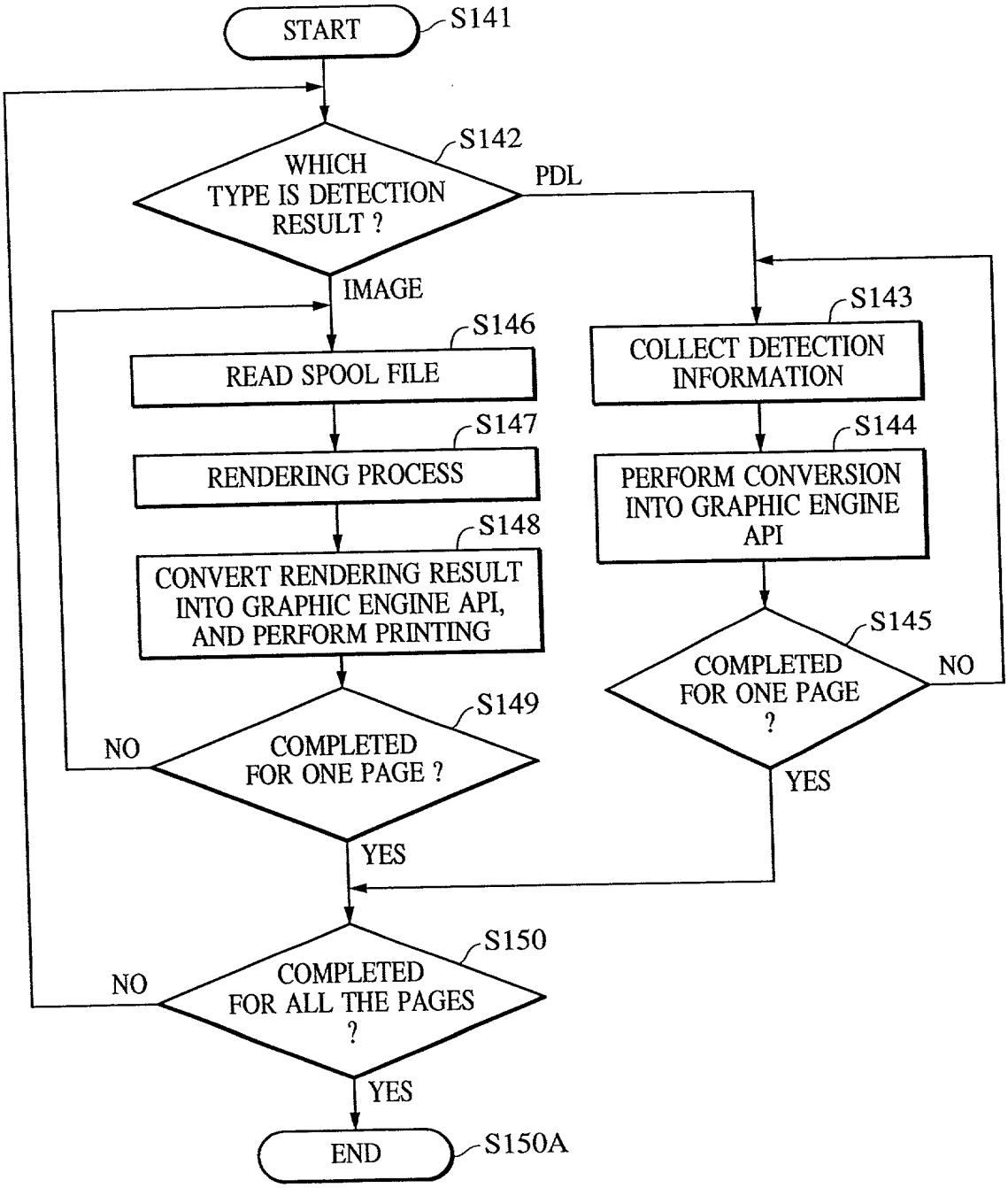

START
S141
WHICH TYPE IS DETECTION RESULT ?
S142
PDL
IMAGE
S143
COLLECT DETECTION INFORMATION
S144
PERFORM CONVERSION INTO GRAPHIC ENGINE API
S145
COMPLETED FOR ONE PAGE ?
NO
YES
S146
READ SPOOL FILE
S147
RENDERING PROCESS
S148
CONVERT RENDERING RESULT INTO GRAPHIC ENGINE API, AND PERFORM PRINTING
S149
COMPLETED FOR ONE PAGE ?
NO
YES
S150
COMPLETED FOR ALL THE PAGES ?
NO
YES
END
S150A

FIG. 15

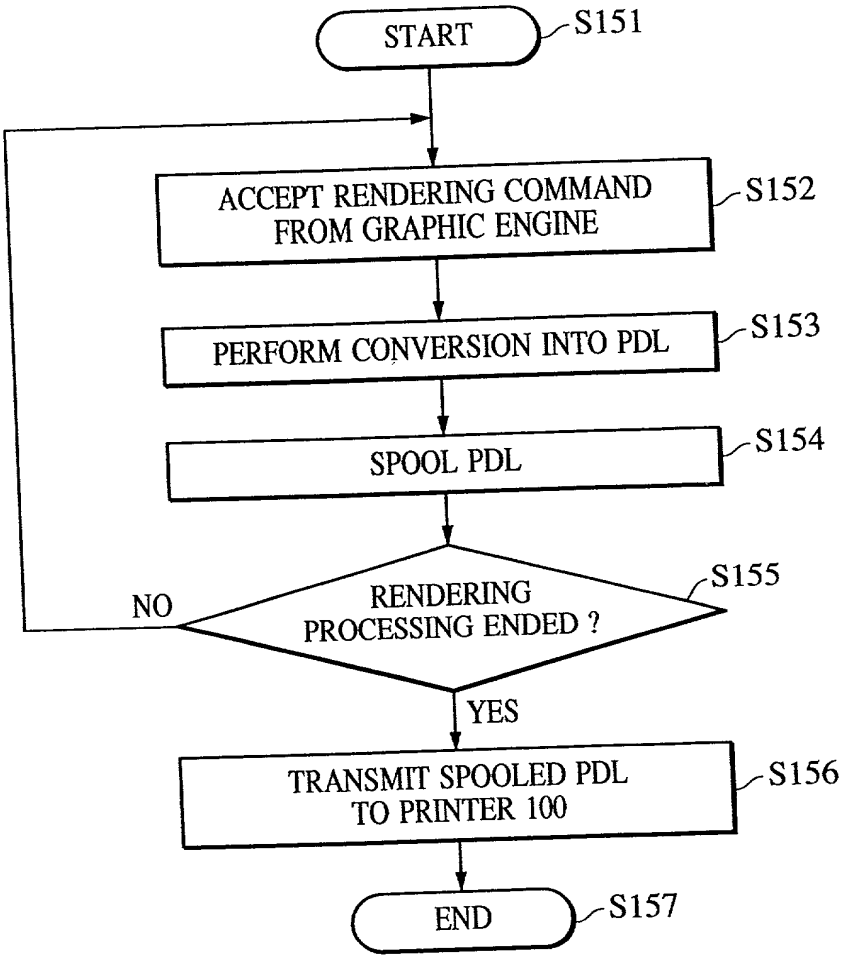

START
S151
ACCEPT RENDERING COMMAND FROM GRAPHIC ENGINE
S152
PERFORM CONVERSION INTO PDL
S153
SPOOL PDL
S154
RENDERING PROCESSING ENDED ?
S155
NO
YES
TRANSMIT SPOOLED PDL TO PRINTER 100
S156
END
S157

FIG. 16

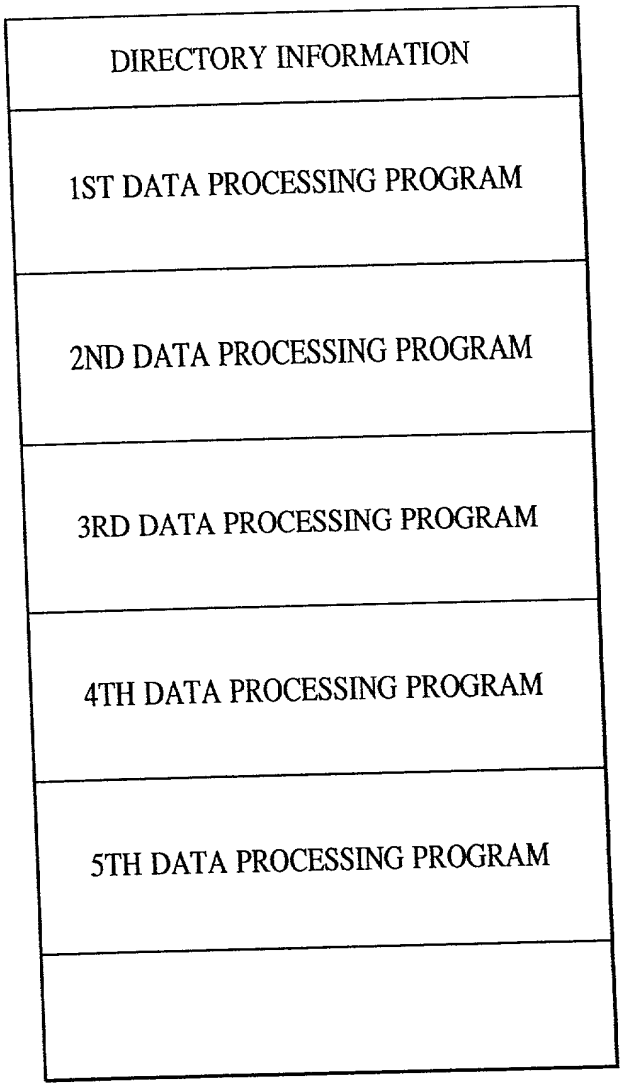

DIRECTORY INFORMATION
1ST DATA PROCESSING PROGRAM
2ND DATA PROCESSING PROGRAM
3RD DATA PROCESSING PROGRAM
4TH DATA PROCESSING PROGRAM
5TH DATA PROCESSING PROGRAM

FIG. 17

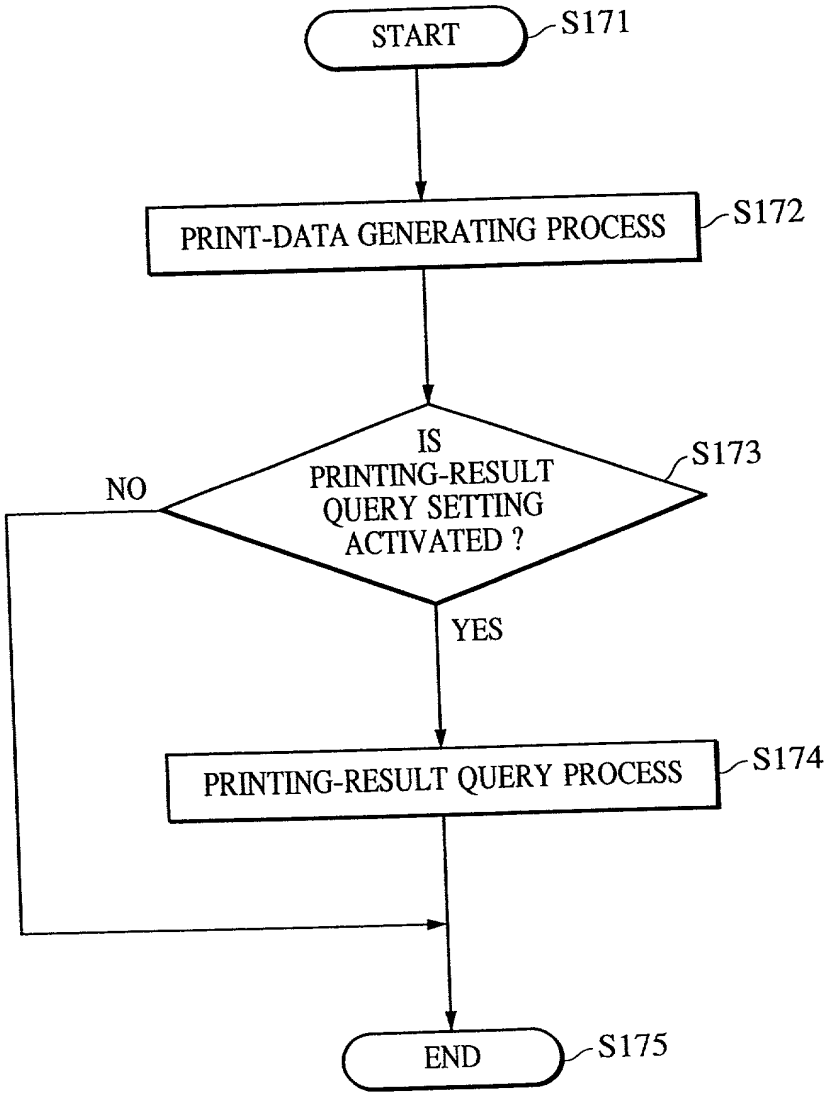

START
S171
PRINT-DATA GENERATING PROCESS
S172
IS PRINTING-RESULT QUERY SETTING ACTIVATED ?
S173
NO
YES
PRINTING-RESULT QUERY PROCESS
S174
END
S175

FIG. 18

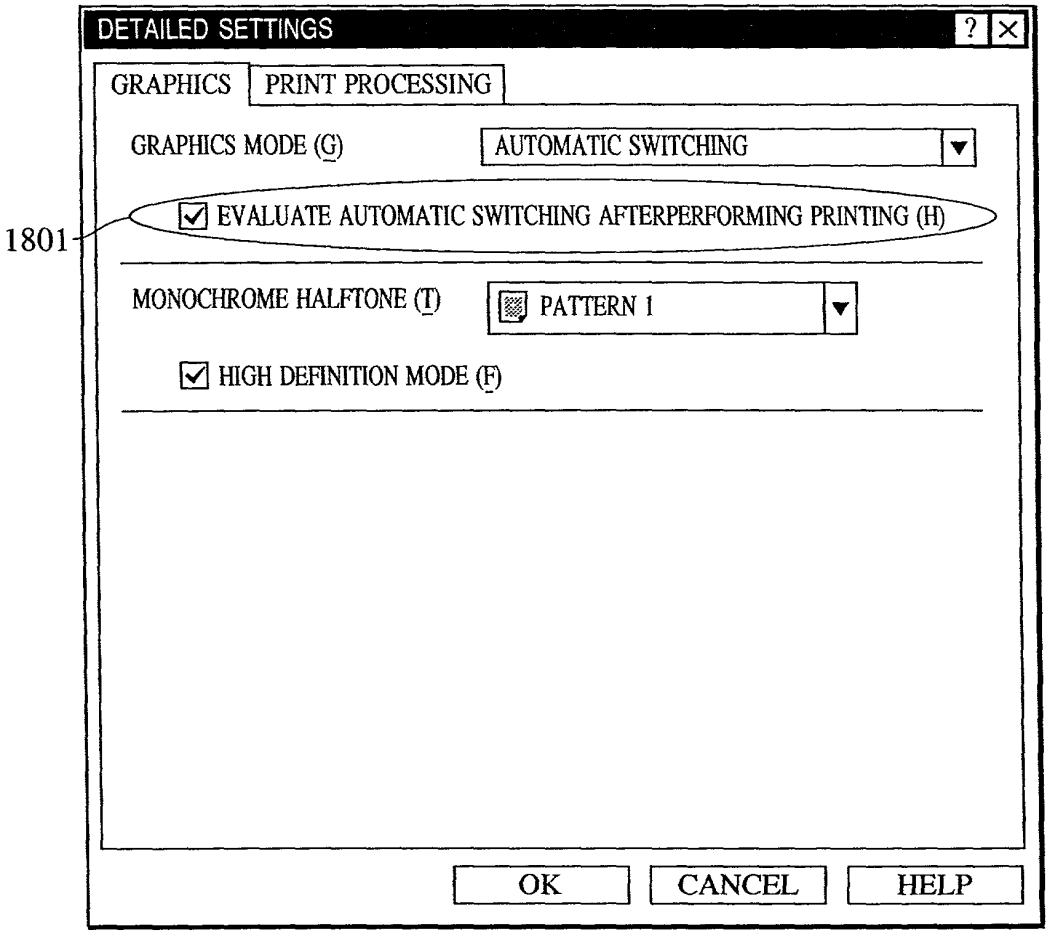
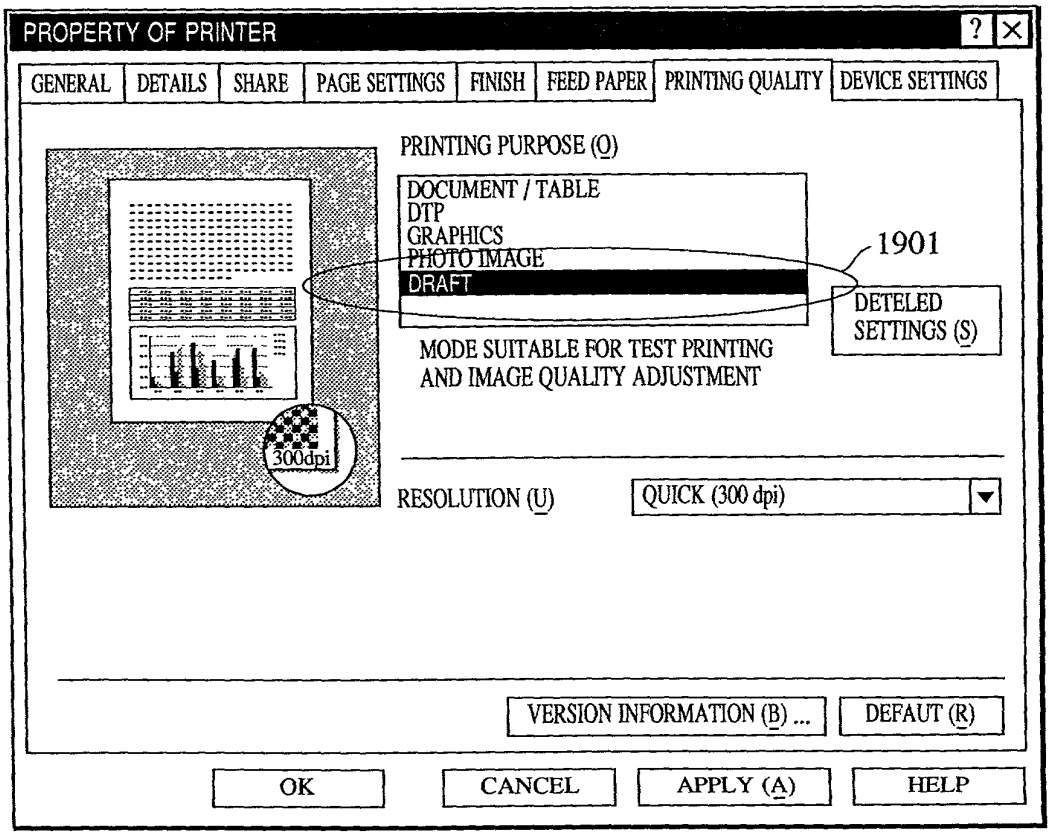

DETAILED SETTINGS
GRAPHICS
PRINT PROCESSING
GRAPHICS MODE (G)
AUTOMATIC SWITCHING
EVALUATE AUTOMATIC SWITCHING AFTERPERFORMING PRINTING (H)
1801
MONOCHROME HALFTONE (T)
PATTERN 1
HIGH DEFINITION MODE (F)
OK
CANCEL
HELP

FIG. 19


PROPERTY OF PRINTER
GENERAL
DETAILS
SHARE
PAGE SETTINGS
FINISH
FEED PAPER
PRINTING QUALITY
DEVICE SETTINGS
PRINTING PURPOSE (O)
DOCUMENT / TABLE
DTP
GRAPHICS
PHOTO IMAGE
DRAFT
1901
DETELED SETTINGS (S)
MODE SUITABLE FOR TEST PRINTING AND IMAGE QUALITY ADJUSTMENT
300dpi
RESOLUTION (U)
QUICK (300 dpi)
VERSION INFORMATION (B) ...
DEFAUT (R)
OK
CANCEL
APPLY (A)
HELP